IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): ~~Method~~ A method for manufacturing an actuation system for an optical component, the method comprising:

[[-]] etching ~~of~~ a first face [[(51)]] of a component to form pads ~~(14, 54, 154)~~,

[[-]] etching ~~of~~ a second face [[(53)]] of ~~the~~ said component to expose a flexible or deformable membrane ~~(12, 52, 152)~~ made of the same material as the pads, and

~~[production of~~ producing actuation means ~~(16, 17, 30, 32, 56, 57)~~ of the pads and membrane.

Claim 2 (Currently Amended): ~~Method~~ The method according to claim 1, ~~the~~ wherein said membrane and ~~the~~ said pads ~~having~~ have a total thickness less than 30μm, or between 5 μm and 15 μm.

Claim 3 (Currently Amended): ~~Method~~ The method according to claim ~~1 or~~ 2, ~~the~~ wherein said membrane ~~having~~ and said pads have a total thickness between [[1]] 5 μm and [[5]] 15 μm.

Claim 4 (Currently Amended): ~~Method~~ The method according to ~~one of claims 1 to 3~~ Claim 1, ~~the~~ wherein said component ~~being~~ is made from a semiconducting material or glass[[(51)]], and ~~being~~ is provided with a surface layer [[(60)]] of semiconducting material or nitride in which the pads and membrane are etched.

Claim 5 (Currently Amended): ~~Method~~ The method according to ~~one of claims 1~~

~~to 4~~ claim 1, ~~the~~ wherein said component ~~being~~ is of the SOI type comprising a surface layer of silicon[[(501)]], an insulating layer [[(502)]] and a substrate[[(503)]], the pads and the membrane being made in the surface layer of silicon.

Claim 6 (Currently Amended): ~~Method~~ The method according to ~~one of claims 1 to 3~~ claim 1, ~~the~~ wherein said component ~~being~~ is a silicon substrate covered by an insulating layer and a layer of polysilicon or a silicon substrate covered by a nitride layer, the pads and the membrane being made in the insulating or polysilicon or nitride layer respectively.

Claim 7 (Currently Amended): ~~Method~~ The method according to ~~one of claims 1 to 3~~ claim 1, ~~the~~ wherein said component ~~being~~ is a silicon substrate doped on two sides ~~(151, 153)~~, the membrane and the pads being made in portions ~~(152, 153)~~ that are doped differently from each other.

Claim 8 (Currently Amended): ~~Method~~ The method according to ~~one of claims 1 to 7~~ claim 1, ~~the~~ wherein said actuation means ~~being~~ is of the electrical or magnetic or thermal or piezo-electric type.

Claim 9 (Currently Amended): ~~Method~~ The method according to ~~one of claims 1 to 7~~ claim 1, ~~the~~ wherein said actuation means ~~being~~ is of the electrical type and ~~comprising~~ comprises one or several mobile electrodes ~~(16, 56)~~, connected to ~~the~~ said pads ~~of the device~~, and one or several fixed electrodes ~~(17, 57)~~.

Claim 10 (Currently Amended): ~~Method~~ The method according to ~~one of claims 1 to 7~~ claim 1, ~~the~~ wherein said actuation means ~~being~~ is of the magnetic type and ~~comprising~~

comprises one or several mobile coils [[(30)]] or magnets, connected to the pads of the device, and one or several fixed magnets [[(32)]] or coils.

Claim 11 (Currently Amended): ~~Method~~ The method according to ~~one of claims 1 to 10~~ claim 1, ~~also~~ further comprising a step for making a first part [[(56)]] of ~~the~~ said actuation means on the pads.

Claim 12 (Currently Amended): ~~Method~~ The method according to claim 11, ~~also~~ further comprising an assembly step with a second substrate [[(58)]] on which a second part [[(57)]] of ~~the~~ said actuation means is made, which cooperates with the first part to actuate ~~the~~ said pads and ~~the~~ said membrane.

Claim 13 (Currently Amended): ~~Method~~ The method according to ~~one of claims 1 to 10~~ claim 1, ~~the~~ wherein said actuation means ~~(16, 17, 30, 32, 56, 57) being~~ is performed in an assembly step of ~~the~~ said membrane and pads with a second substrate [[(58)]] on which ~~these~~ said means were previously formed.

Claim 14 (Currently Amended): ~~Method~~ The method according to ~~one of claims 1 to 13~~ claim 1, ~~the~~ wherein said pads ~~having~~ have a width or a width base less than 2 μm.

Claim 15 (Currently Amended): ~~Method~~ The method according to ~~one of claims 1 to 14~~ claim 1, ~~the~~ wherein said pads ~~having~~ have a height / width ratio less than 20.

Claim 16 (Currently Amended): ~~Method~~ The method for making an optical component comprising production of an actuation system according to ~~one of claims 1 to 15~~ claim 1, ~~and~~ further comprising formation of reflecting means on the membrane.

Claim 17 (Currently Amended): ~~Mechanical~~ A mechanical actuation system, for an optical component, comprising:

[[-]] a membrane ~~(12, 52, 152)~~ provided with pads ~~(14, 54, 154)~~ formed integrally with ~~the~~ said membrane on one of its faces, ~~the~~ said pads or ~~the~~ said membrane being made:

[[•]] in a surface layer [[(60)]] made of semiconducting material or nitride, formed on a semiconducting material or glass[[(50)]],

[[•]] or in the silicon surface layer [[(501)]] of an SOI type component,

[[•]] or in a polysilicon or nitride surface layer deposited either directly on a substrate, or on an insulating layer itself deposited on a substrate,

[[•]] or in differently doped zones ~~(152, 153)~~ of a semiconducting substrate[[.]] and

[[-]] actuation means ~~(16, 17, 30, 32, 56, 57)~~ of ~~the~~ said pads and said membrane.

Claim 18 (Currently Amended): ~~System~~ The system according to claim 17, ~~the~~ wherein said membrane and said pads ~~having~~ have a total thickness less than 30μm or between 5μm and 30μm.

Claim 19 (Currently Amended): ~~System~~ The system according to claim 17 ~~or 18~~, ~~the flexible~~ wherein said membrane ~~having~~ has a thickness between 1 μm and 5 μm.

Claim 20 (Currently Amended): ~~System~~ The system according to ~~one of claims 17 to 19~~ claim 17, ~~the~~ wherein said membrane ~~being~~ is flexible.

Claim 21 (Currently Amended): ~~System~~ The system according to ~~one of claims 17 to 20~~ claim 17, ~~the~~ wherein said actuation means ~~being~~ is of the electrical or magnetic or thermal type.

Claim 22 (Currently Amended): ~~System~~ The system according to ~~one of claims 17 to 20~~ claim 17, ~~the~~ wherein said actuation means ~~being~~ is of the electrical type and ~~comprising~~ comprises one or several mobile electrodes ~~(16, 56)~~, connected to ~~the~~ said pads ~~of the device~~, and one or several fixed electrodes ~~(17, 57)~~.

Claim 23 (Currently Amended): ~~System~~ The system according to ~~one of claims 17 to 20~~ claim 17, ~~the~~ wherein said actuation means ~~being~~ is of the magnetic type and ~~comprising~~ comprises one or several mobile coils or magnets[[(30)]], connected to the pads of the device, and one or several fixed magnets or coils[[(32)]].

Claim 24 (Currently Amended): ~~System~~ The system according to ~~one of claims 17 to 23~~ claim 17, ~~the~~ wherein said pads ~~having~~ have a width or width base less than 2 μm.

Claim 25 (Currently Amended): ~~System~~ The system according to ~~one of claims 17 to 24~~ claim 17, ~~the~~ wherein said pads ~~having~~ have a height / width ratio less than 20.

Claim 26 (Currently Amended): ~~Optical~~ An optical component comprising an actuation system according to ~~one of claims 17 to 25~~ claim 17, and reflecting means on the membrane.

Claim 27 (New): The method according to claim 1, wherein said membrane has a thickness of between 1 μm and 5 μm.